(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 22 September 2005 (22.09.2005)

PCT

US

(10) International Publication Number WO 2005/087226 A1

- (51) International Patent Classification⁷: A61K 31/381, 31/122, 31/445
- (21) International Application Number:

PCT/US2005/007274

- (22) International Filing Date: 4 March 2005 (04.03.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:

60/549,939 5 March 2004 (05.03.2004)

- (71) Applicant (for all designated States except US): EISAI CO., LTD. [JP/JP]; 4-6-10, Koishikawa, Bunkyo-ku, Tokyo 112-8088 (JP).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): IENI, John [US/US]; 253 Ridgewood Avenue, Glen Ridge, NJ 07028 (US).
- (74) Agents: GRIEFF, Edward, D. et al.; Wilmer Cutler Pickering Hale and Dorr LLP, 1455 Pennsylvania Avenue, N.W., Washington, DC 20004 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CADASIL TREATMENT WITH CHOLINESTERASE INHIBITORS

(57) Abstract: The invention provides methods for treating and/or preventing cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL) in a patient in need thereof by administering a therapeutically effective amount of at least one cholinesterase inhibitor. The invention also provides methods for treating and/or preventing neurovascular diseases caused by one or more mutations of the human Notch3 gene by administering a therapeutically effective amount of at least one cholinesterase inhibitor. In one embodiment, the cholinesterase inhibitor is donepezil, a stereoisomer thereof and/or a pharmaceutically acceptable salt thereof. The methods of the invention may further include administering a therapeutically effective amount of an HMG-CoA reductase inhibitor.

